AMENDMENTS TO THE CLAIMS

Listing of Claims:

Claim 1 (currently amended): A process for the preparation of racemic diol free base ~~and/or~~ or acid addition salt thereof, and/or R- or S-diol free base ~~and/or~~ or acid addition salt thereof from an initial non-racemic mixture of R- and S-diol free base or acid addition salt thereof, comprising the steps of: ~~a separation of an initial non-racemic mixture of R- and S-diol free base and/or acid addition salt with more than 50% of one of the enantiomers into a fraction being enriched with S-diol or R-diol free base and/or acid addition salt and a fraction comprising RS-diol free base and/or acid addition salt wherein the ratio of R-diol:S-diol is equal to 1:1 or closer to 1:1 than in the initial mixture of R- and S-diol characterized in that~~

i) precipitating RS-diol free base ~~and/or~~ or acid addition salt thereof ~~is precipitated~~ from a solution of the initial non-racemic mixture, leaving a final solution phase comprising R- or S-diol free base or acid addition salt thereof, wherein the precipitated RS-diol comprises a ratio of R-diol:S-diol that is equal to 1:1 or closer to 1:1 than the initial non-racemic mixture ~~of R- and S-diol free base and/or acid addition salt~~; or

mixing a solution of the initial non-racemic mixture with a solvent to preferentially dissolve R- or S-diol free base ~~and/or~~ or acid addition salt thereof into a final solution phase ~~is dissolved into a solvent from the initial non-racemic mixture of R- and S-diol free base and/or acid addition salt in said solvent~~, leaving a residue comprising RS-diol free base ~~and/or~~ or acid addition salt thereof;

ii) separating the residue/precipitate ~~formed is separated~~ from the final solution phase;

~~iia)~~ iii.a) if the residue/precipitate is crystalline, ~~it is~~ optionally recrystallizing the residue/precipitate ~~recrystallised~~ one or more times to form racemic diol; or

~~iib)~~ iii.b) if the residue/precipitate is not crystalline, optionally repeating steps i) and ii) ~~are optionally repeated~~ until a crystalline residue/precipitate is obtained and optionally recrystallizing the crystalline residue/precipitate ~~is optionally recrystallised~~ one or more times to form racemic diol;

~~iii)~~ iv) optionally subjecting the final solution phase ~~is optionally subjected~~ to further purification; ~~and~~

v) isolating S-diol or R-diol free base ~~and/or~~ or acid addition salt thereof ~~is isolated~~ from the final solution phase; and

~~iv)~~ vi.a) optionally converting the S-diol or R-diol free base ~~free bases of the diols obtained are optionally converted~~ to an acid addition ~~salts~~ salt thereof; ~~or~~

vi.b) optionally converting the acid addition ~~salts~~ salt of the S-diol or R-diol free base ~~diols obtained are optionally converted~~ to ~~other~~ another acid addition ~~salts~~ salt; or

vi.c) optionally converting the acid addition ~~salts~~ salt of the S-diol or R-diol free base ~~diols obtained are optionally converted~~ to the corresponding free ~~bases~~ base.

Claim 2 (currently amended): A process ~~according to claim 1~~ for the preparation of S-diol or R-diol free base ~~and/or~~ or acid addition salt ~~characterized in that~~ thereof from an initial non-racemic mixture of R- and S-diol free base or acid addition salt thereof, comprising the steps of:

i) precipitating RS-diol free base ~~and/or~~ or acid addition salt thereof ~~is precipitated~~ from a solution of the initial non-racemic mixture, leaving a final solution phase, wherein the precipitated RS-diol comprises a ratio of R-diol:S-diol that is equal to

1:1 or closer to 1:1 than the initial non-racemic mixture ~~of R- and S-diol free base and/or acid addition salt~~; or

mixing a solution of the initial non-racemic mixture with a solvent to preferentially dissolve R- or S-diol free base ~~and/or~~ or acid addition salt thereof into a final solution phase ~~is dissolved into a solvent from the initial non-racemic mixture of R- and S-diol free base and/or acid addition salt in said solvent~~, leaving a residue comprising RS-diol free base ~~and/or~~ or acid addition salt thereof;

ii) separating the residue/precipitate ~~formed is separated~~ from the final solution phase;[[,]] ~~and~~

iii) optionally subjecting the final solution phase ~~is optionally subjected~~ to further purification; and

iv) isolating S-diol or R-diol free base ~~and/or~~ or acid addition salt thereof ~~is isolated~~ from the final solution phase.

Claim 3 (currently amended): ~~A~~ The process ~~according to~~ of claim 2, wherein the diol prepared is the S-diol free base ~~and/or~~ or acid addition salt thereof.

Claim 4 (currently amended): ~~A~~ The process ~~according to~~ of claim 2, wherein the diol prepared is the R-diol free base ~~and/or~~ or acid addition salt thereof.

Claim 5 (currently amended): A process ~~according to claim 1~~ for the preparation of racemic diol free base ~~and/or~~ or acid addition salt thereof, comprising the steps of: ~~characterized in that~~

i) precipitating RS-diol free base ~~and/or~~ or acid addition salt thereof ~~is precipitated~~ from a solution of the initial non-racemic mixture, leaving a final solution phase, wherein the precipitated RS-diol comprises a ratio of R-diol:S-diol that is equal to 1:1 or closer to 1:1 than the initial non-racemic mixture ~~of R- and S-diol free base and/or acid addition salt~~; or

mixing a solution of the initial non-racemic mixture with a solvent to preferentially dissolve R- or S-diol free base ~~and/or~~ or acid addition salt thereof into a final solution phase ~~is dissolved into a solvent from the initial non-racemic mixture of R- and S-diol free base and/or acid addition salt in said solvent~~, leaving a residue comprising RS-diol free base ~~and/or~~ or acid addition salt thereof;

ii) separating the residue/precipitate ~~formed is separated~~ from the final solution phase;[[,]]

~~iia)~~ iiia) if the residue/precipitate is crystalline, ~~it is~~ optionally recrystallizing the residue/precipitate ~~recrystallised~~ one or more times to form racemic diol; or

~~iib)~~ iiib) if the residue/precipitate is not crystalline, optionally repeating steps i) and ii) ~~are optionally repeated~~ until a crystalline residue/precipitate is obtained and optionally recrystallizing the crystalline residue/precipitate ~~is optionally recrystallised~~ one or more times to form racemic diol.

Claim 6 (currently amended): The process of claim 1, ~~according to any one of claims 1-5~~ wherein the initial non-racemic mixture ~~of R- and S-diol free base and/or acid addition salt with more than 50% of one of the enantiomers~~ contains more than 50% of S-diol~~, more preferred more than 70% of S-diol or most preferred more than 90% of S-diol~~.

Claim 7 (currently amended): The process of claim 1, ~~according to any one of claims 1-5~~ wherein the initial non-racemic mixture ~~of R- and S-diol free base and/or acid addition salt with more than 50% of one of the enantiomers~~ contains more than 50% of R-diol~~, more preferred more than 70% of R-diol or most preferred more than 90% of R-diol~~.

Claim 8 (currently amended): The process of claim 1 ~~according to any one of claims 1-7~~, wherein the ratio of R-diol:S-diol in the RS-diol of the residue/precipitate is in the range of 0.5:1.5 to ~~or 0.9:1.1 or 0.95:1.05 or 0.99:1.01 or 0.98:1.02 or preferably~~ 1:1.

Claim 9 (currently amended): The process of claim 1, ~~according to any one of claims 1-8~~ wherein the RS-diol ~~comprised in~~ of the residue/precipitate and the R- or S-diol of the final solution phase are each independently ~~is~~ in the form of a free base ~~and/or~~ or an acid addition salt thereof~~; and independently thereof the R- or S-diol comprised in the final solution phase is in the form of a free base and/or as an acid addition salt thereof~~.

Claim 10 (currently amended): The process of claim 1, ~~according to any one of claims 1-9~~ wherein RS-diol free base ~~and/or~~ or acid addition salt thereof is precipitated from a solution of the initial non-racemic mixture ~~of R- and S-diol free base and/or acid addition salt~~.

Claim 11 (currently amended): The process of claim 1, ~~according to any one of claims 1-10~~ wherein the ~~acid used for precipitating~~ RS-diol is precipitated using ~~as a salt in step i) is~~ an acid

~~which precipitates a mixture of the R- and S-enantiomers and leaves the mother liquor enriched with either the S- or R-enantiomer of the diol free base and/or acid addition salt~~.

Claim 12 (currently amended): The process of ~~according to~~ claim 11 wherein the initial non-racemic mixture is obtained or dissolved in a suitable solvent and the acid is ~~may be~~:

added after the initial non-racemic mixture ~~of R- and S-diol free base and/or acid addition salt~~ is obtained or dissolved in a suitable solvent; ~~and/or~~

present in the solvent during and/or prior to dissolution of the initial non-racemic mixture ~~of R- and S-diol free base and/or acid addition salt~~; and/or

present in the initial non-racemic mixture ~~of R- and S-diol free base and/or acid addition salt~~ during and/or prior to dissolution in the solvent.

Claim 13 (currently amended): The process of claim 1, ~~according to any one of claims 1-9~~ wherein a solution of the initial non-racemic mixture is mixed with a solvent to preferentially dissolve R- or S-diol free base ~~and/or~~ or acid addition salt thereof into a final solution phase ~~is dissolved into a solvent from the initial non-racemic mixture of R- and/or S-diol free base and/or acid addition salt in said solvent~~, leaving a residue comprising RS-diol free base ~~and/or~~ or acid addition salt thereof.

Claim 14 (currently amended): The process of claim 1, ~~according to any one of claims 1-9 and 13~~ wherein RS-diol acid addition salt is formed as a residue having an ~~the~~ acidic part that comprises ~~of the RS-diol acid addition salt comprised in the residue formed in step i) is~~ an acid

~~which allows the selective dissolution of either R- or S-diol free base and/or acid addition salt and leaves the undissolved material enriched with the RS-diol acid addition salt~~.

Claim 15 (currently amended): The process of ~~according to~~ claim 13 wherein the acid is ~~may be~~:

present in the solvent before the initial non-racemic mixture ~~of R- and S-diol free base and/or acid addition salt~~ is mixed with the solvent; ~~and/or~~

mixed with the solvent together with the initial non-racemic mixture ~~of R- and S-diol free base and/or acid addition salt~~; ~~and/or~~

mixed with the solvent after the initial non-racemic mixture ~~of R- and S- diol free base and/or acid addition salt~~ is mixed with the solvent; and/or

present in the initial non-racemic mixture ~~of R- and S-diol free base and/or acid addition salt~~ during and/or prior to the mixing with the solvent.

Claim 16 (currently amended): ~~A~~ The process of claim 14, ~~method according to claims 1-15~~ wherein ~~the RS-diol acid addition salt is obtained from~~ the initial non-racemic mixture ~~of R- and S-diol free base and/or acid addition salt in~~ is mixed with a solvent selected from ~~the group consisting of~~ toluene, ethylacetate, diethylether, THF, water, alcohols ~~such as iso-propylalcohol~~, acetonitrile, ~~and~~ ketones, and ~~such as acetone and methyl isobutyl ketone; or~~ mixtures thereof.

Claim 17 (currently amended): The process of claim 1, ~~according to any one of claims 1-16~~ wherein the residue/precipitate is formed using an acid selected from ~~used in step i) is~~ HCl, HBr, H_2SO_4, p-toluenesulfonic acid, methanesulfonic acid, acetic acid, and ~~or~~ oxalic acid.

Claim 18 (currently amended): The process of ~~according to~~ claim 17, wherein the ~~the~~ acid is selected from ~~used in step i) is~~ HCl, HBr, and ~~or~~ oxalic acid~~; thereby a hydrobromide salt, hydrochloride salt or oxalate salt of the RS-diol is formed, preferably in crystalline form~~.

Claim 19 (currently amended): The process of claim 1 ~~according to any one of claims 1-18~~, wherein the residue/precipitate is formed using 0.2-10 mol of acid ~~may be used, such as 0.2-0.4 mol, or 0.4-0.6 mol, or 0.9-1.1 mol or 1.8-2.2 mol of acid is used~~ for each mol of S- and R-diol comprised in the initial non-racemic mixture ~~of R- and S-diol free base and/or acid addition salt~~.

Claim 20 (currently amended): The process of claim 1 ~~according to any one of claims 1-18~~, wherein the residue/precipitate is formed using 0.3-4.0 mol~~, such as 0.4-0.6 mol, or 0.9-1.1 mol or 1.8-2.2 mol~~ of acid ~~is used~~ for each mol of RS-diol comprised in the residue/precipitate.

Claim 21 (currently amended): The process of claim 1, ~~according to any one of claims 1-10 and 13~~ wherein the residue/precipitate is ~~a free base of the~~ RS-diol free base ~~is obtained in step i), preferably~~ in crystalline form.

Claim 22 (currently amended): ~~A method according to any one of claims 1-10, 13 and 21~~ The process of claim 1, wherein the residue/precipitate is RS-diol free base ~~is obtained from~~ and the initial non-racemic mixture ~~of R- and S-diols~~ is in a solvent selected from ~~the group consisting of~~ alkanes ~~such as heptane or hexane~~, aromatic hydrocarbons ~~such as toluene, benzene and xylene~~,

polar solvents ~~such as acetonitrile~~, alcohols, ~~such as methanol and iso propylalcohol and~~ ketones, and ~~such as methyl isobutyl ketone; or~~ mixtures thereof.

Claim 23 (currently amended): The process of claim 1, ~~according to any one of claims 1-22~~ wherein the final solution phase is subjected to one or more further purifications according to ~~separations of RS-diol as described under~~ steps i) and ii) before isolation of the S-diol or ~~(R-diol)~~ R-diol free base or acid addition salt thereof from the final solution phase.

Claim 24 (currently amended): The process of claim 1, ~~according to any one of claims 1-4 and 6-23~~ wherein the S-diol ~~(or R-diol)~~ or R-diol free base or acid addition salt thereof is isolated from the final solution phase by evaporation of the solvent.

Claim 25 (currently amended): The process of claim 1, ~~according to any one of claims 1-4 and 6-24~~ wherein the final solution phase is acidic and the S-diol ~~(or R-diol)~~ or R-diol free base or acid addition salt thereof is isolated from the final solution phase by ~~basifying~~ basification of the final solution phase, followed by phase separation or extraction with a solvent, followed by evaporation of the solvent.

Claim 26 (currently amended): The process of claim 1 ~~according to any one of claims 1-4 and 6-24~~, wherein the S-diol ~~(or R-diol)~~ or R-diol free base ~~and/or~~ or acid addition salt thereof is isolated from the final solution phase by precipitation of the R- or S-diol free base ~~and/or~~ or acid addition salt thereof~~; suitably a phosphate salt or an oxalate salt of R- or S-diol is precipitated~~.

Claim 27 (currently amended): The process of claim 1, ~~according to any one of claims 1-4 and 6-26~~ wherein the S-diol ~~(or R-diol)~~ or R-diol free base or acid addition salt thereof obtained contains a minor amount of the opposite enantiomer ~~such as less than 3%, more preferred less than 2%, or most preferred less than 1%~~.

Claim 28 (canceled)

Claim 29 (currently amended): A method for the preparation of citalopram free base or an ~~and/or as~~ acid addition salt thereof, and/or S-citalopram free base ~~and/or as~~ or an acid addition salt thereof or ~~and/or~~ R-citalopram free base ~~and/or as~~ or an acid addition salt thereof, comprising the process of claim 1 ~~preparation of RS-diol free base and/or as acid addition salt and/or S-diol free base and/or as acid addition salt and/or R-diol free base and/or as acid addition salt according to any of claims 1-27~~ followed by ring closure.

Claim 30 (new): The process of claim 6, wherein the initial non-racemic mixture contains more than 70% of S-diol.

Claim 31 (new): The process of claim 30, wherein the initial non-racemic mixture contains more than 90% of S-diol.

Claim 32 (new): The process of claim 7, wherein the initial non-racemic mixture contains more than 70% of R-diol.

Claim 33 (new): The process of claim 32, wherein the initial non-racemic mixture contains more than 90% of R-diol.

Claim 34 (new): The process of claim 8, wherein the ratio of R-diol:S-diol in the RS-diol of the residue/precipitate is 0.5:1.5, 0.9:1.1, 0.95:1.05, 0.99:1.01, 0.98:1.02, or 1:1.

Claim 35 (new): The process of claim 16, wherein the solvent is selected from iso-propylalcohol, acetone, methyl isobutyl ketone, and mixtures thereof.

Claim 36 (new): The process of claim 18, wherein a crystalline hydrobromide salt, hydrochloride salt or oxalate salt of the RS-diol is formed.

Claim 37 (new): The process of claim 19, wherein the residue/precipitate is formed using an amount of acid selected from 0.2-0.4 mol, 0.4-0.6 mol, 0.9-1.1 mol, and 1.8-2.2 mol, for each mol of S- and R-diol comprised in the initial non-racemic mixture.

Claim 38 (new): The process of claim 20, wherein the residue/precipitate is formed using an amount of acid selected from 0.4-0.6 mol, 0.9-1.1 mol, and 1.8-2.2 mol for each mol of RS-diol comprised in the residue/precipitate.

Claim 39 (new): The process of claim 22, wherein the solvent is selected from heptane, hexane, toluene, benzene, xylene, acetonitrile, methanol, iso-propylalcohol, methyl isobutyl ketone, and mixtures thereof.

Claim 40 (new): The process of claim 26, wherein an S-diol or R-diol acid addition salt is precipitated in the form of a phosphate salt or an oxalate salt.

Claim 41 (new): The process of claim 27, wherein the S-diol or R-diol free base or acid addition salt thereof obtained contains less than 3% of the opposite enantiomer.

Claim 42 (new): The process of claim 41, wherein the S-diol or R-diol free base or acid addition salt thereof obtained contains less than 2% of the opposite enantiomer.

Claim 43 (new): The process of claim 42, wherein the S-diol or R-diol free base or acid addition salt thereof obtained contains less than 1% of the opposite enantiomer.